

Model Conversion Factors
-Peak Period to Peak Hour-

1. Passenger Car Model
AM – 0.38
PM – 0.28
2. Truck Model
AM - 0.333
PM – 0.25

**Model Post Processing
-Segment Volumes-
For Future Intersection Analysis**

1. Passenger Car Model
Base Year – 2000
Future Year – 2025
 - a. Determine the model growth:
 $2025 \text{ minus } 2000 = \text{Model Growth}$
 - b. Determine the model growth from existing year:
If this is year 2002, then the model growth from 2002 to 2025 is 23/25 times Model Growth (a. above).
 - c. Determine the adjusted 2025 passenger car volume:
Add the 2002 to 2025 model growth to the existing traffic count.
2. Truck Model – (Note: If existing truck model does not appear to represent the truck volumes very well, contact SANBAG for another methodology.)
Base Year – 1994 (Assume as base year 2000) in PCE's
Future Year – 2020 in PCE's
 - a. Determine the model growth in PCE's:
 $2020 - 1994 (2000) = \text{Model Growth}$
 - b. Determine the model growth from 1994 (2000) to 2025 in PCE's:
Model Growth (2020 – 1994 (2000)) times 1.25 equals Model Growth from 2000 to 2025.
 - c. Determine the model growth from existing year:
If this is year 2002, then the model growth from 2002 to 2025 is 23/25 times model growth from 2000 to 2025 (b. above).
 - d. Determine the adjusted 2025 truck volume in PCE's:
Add the 2002 to 2025 truck model growth in PCE's to the existing truck count in PCE's.
3. Future Post Processed Traffic Volumes
Add the adjusted 2025 passenger car volume to the adjusted truck volume (in PCE's).
4. For intersection LOS Analysis use “B” Turns Software (available through SCAG's Riverside Office – Contact Mike Ainsworth at (909) 784-1513). The software uses existing intersection turning movements in PCE's and future post processed 2-way segment volumes in PCE's to determine the future intersection turning movements that matches the future segment volumes. Input the resulting future turning movements to your intersection analysis software.

Model Post Processing
When An Interchange or Intersection Does Not Exist
At This Time

Proposed Interchange

1. Determine average % model error in the area of the new interchange and apply to future model intersection turning movements for input to your intersection analysis software. (Note: Model turning movements – Use a composite of passenger car and truck volumes in PCE's.)
 - a. Take turning movement counts (Passenger Car and Trucks in PCE's) at the ramps of the existing interchanges on each side of the proposed interchange.
 - b. Determine the volume of each approach count in PCE's for one of the two interchanges, 6 in all and add together. Then divide this total by the same model approach total in PCE's to get the % the model is over or under calculating the ground count.
 - c. Determine the % the model is over or under calculating the ground count at the other interchange.
 - d. Average the % changes between the 2 interchanges.
 - e. Apply the average % change to the future proposed interchange ramp intersections and any new intersections in the vicinity of the proposed interchange.
 - f. Input the resulting future turning movements to the new ramp and other intersections into your software for LOS analysis.

Proposed Intersection

- a. Apply same methodology as above to determine average model error.
- b. Use 2 similar existing intersections in the area of the proposed intersection for analysis.